

The Commonwealth of Massachusetts

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June 6, 2003

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME

: Nantucket Shoals Wind Turbine

Generators

PROJECT MUNICIPALITY

: Harwich and offshore from Nantucket

PROJECT WATERSHED

: offshore state and federal waters

EOEA NUMBER

: 12993

PROJECT PROPONENT

: Winergy LLC

DATE NOTICED IN MONITOR : March 25, 2003

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project requires the preparation of an Environmental Impact Report (EIR).

Offshore Renewable Energy and Coastal Development

I strongly support the development of renewable energy in the Commonwealth, and I firmly believe that an ambitious program of renewable energy development is in the interests of the people of Massachusetts. At a global and national level, the potential for climate change, global climate disruption, and rapid sea level rise dictate the need for alternatives to hydrocarbon combustion as a primary source of energy. At a regional level, development of a thriving renewable market will help diversify New England's energy mix, improve regional air quality, and create a hedge against price fluctuations in gas and oil prices. At a state level, development of renewable energy will set Massachusetts in a leadership role in an emerging market, and will ensure compliance with the Commonwealth's renewable energy portfolio standards (M.G.L. ch. 25A s. 11F and 225 CMR 14.00).

Wind power has emerged as the most promising source of renewable energy for the foreseeable future. In Massachusetts, the most promising areas for development of wind power lie primarily off the coast, often in areas recognized for their scenic beauty and value for fisheries, wildlife habitat, and other resources. Despite my strong support for renewable energy, I also have concerns with the current ad hoc system for permitting and development of offshore renewable energy. The recent proliferation of proposed wind farms off the coast, as well as numerous proposed pipelines, electrical lines, fiber-optic cables, off shore sand mining, and the potential for aquaculture development has served to focus attention on the need for a systematic approach to balancing the competing demands on coastal resources. The current approach is reactive and conducted largely on a project-by-project basis. It is time to develop a proactive approach that balances benefits and costs of development, ensures preservation of critical resources, furthers the people's interests in the lands held in public trust, and allows for thoughtful development of coastal resources consistent with state environmental and energy goals.

To develop such a comprehensive, proactive approach to coastal development and preservation, Governor Romney announced the Massachusetts Ocean Management Initiative (MOMI) in March 2003. The centerpiece of MOMI will be the Ocean Management Task Force (OMTF), which I recently appointed and will immediately begin its deliberations. The OMTF will take an integrated approach to ocean management, and will seek advice from regulated parties, government agencies, advocacy groups, and members of the general public on how to best balance the need for conservation of coastal resources with the pressing need for rational development of coastal resources for renewable energy infrastructure, gas transmission pipelines, aquaculture, and traditional uses. OMTF will make recommendations on changes to existing statutes and regulations to better balance the Commonwealth's twin goals of conservation and responsible development. The OMTF will meet later this year, and will submit its recommendations by early 2004.

However pressing the need for reform of coastal regulations may be, the Nantucket Shoals Wind Turbine Generator project, as all other proposed developments, must be reviewed within the context of existing regulations. The review of the Environmental Notification Form (ENF) has left many questions unanswered about project alternatives, impacts, and mitigation. I am requiring the preparation of an EIR to address the outstanding environmental issues; to allow the public full opportunity for

input into the project review; and to provide a forum in which information can be developed and presented to aid in the state permitting process.

Project Description

As described in the Environmental Notification Form (ENF), the proposed project involves development of up to 612 wind turbine generators (WTGs) in three overlapping project sites over an unspecified extent of subtidal area known as Nantucket Shoals, off the southeast coast of Nantucket; associated submarine cables for interconnection of the WTGs; and a submarine cable to provide an interconnection to the onshore electric distribution system. The WTG array and interconnecting cables are located in federal waters, and the cable from the interconnected array to the existing distribution system passes through both federal and state waters and over a portion of the Massachusetts mainland. The proponent has submitted several other ENFs simultaneously with the proposed project in Nantucket Shoals. In separate decisions issued May 29, I required the preparation of EIRs for three separate 10-turbine projects off the coasts of Falmouth, Ipswich, and Truro. In another decision issued today, I have required the preparation of an EIR for a large proposed wind farm in Davis Bank, off the east side of Nantucket.

Standard, Purpose, and Timing of MEPA Review

By any reckoning, the proposed project has generated significant public interest. The Executive Office of Environmental Affairs and the United States Army Corps of Engineers have held six joint scoping meetings on the Winergy LLC proposals. I have received hundreds of letters on the various proposed projects, and received hundreds of pages of transcribed testimony from the six scoping meetings.

Many commenters have stated their opposition to the Nantucket Shoals project and requested that I deny the project because of potential impacts on coastal resources. Under MEPA, I do not have the authority to approve or deny the project. As part of the MEPA process, I will not make substantive judgments as to the proposed use of federal or state waters. MEPA is not a zoning process, nor is it a permitting process. Rather, it is a process designed to ensure public participation in the state environmental permitting process, to ensure that state permitting agencies have adequate information on which to base their permit decisions and their Section 61 Findings, and to ensure that

potential environmental impacts are described fully and avoided, minimized, and mitigated to the maximum feasible extent.

Other commenters have asked that I decline to review the proposed offshore wind farm proposals until such time as a comprehensive system is in place for evaluating the merits of offshore wind development. As discussed above, the MOMI and OMTF will provide such a comprehensive framework, at least for those aspects of the proposed projects subject to the jurisdiction of the (I note that the federal government is currently Commonwealth. considering development of a systematic framework for reviewing offshore non-extractive developments such as wind power.) However, I cannot legally impose any delay or moratorium on the review of any project pending development of additional regulations. When I receive an ENF, I must issue a finding on it in the form of a Certificate within a tightly prescribed statutory deadline. In this case, the amount of study that will be required should ensure that the OMTF has issued its recommendations prior to the Draft EIR for the Nantucket Shoals project undergoing MEPA review. However, the proponent has the right to submit a Draft EIR before any statutory or regulatory changes take place. The proponent assumes any risks that the basic legal framework around the project will change during the course of the review process. I therefore strongly encourage the proponent to delay submission of the Draft EIR until after the OMTF has concluded its work.

Permits and Jurisdiction

The proposed project is undergoing review and requires the preparation of an EIR pursuant to Section 11.03 (3)(a)5. of the MEPA regulations, because the project involves the non waterdependent use of more than an acre of tidelands. The project also triggers review thresholds related to the electric transmission line (see 301 CMR 11.03(7)(b)4.). The project will require a Chapter 91 License and a Chapter 91 Variance from the Department of Environmental Protection (DEP); an Order of Conditions from the Harwich Conservation Commission, and hence a Superseding Order from DEP in the event of an appeal; Consistency Review by the Massachusetts Coastal Zone Management Office; review by the Massachusetts Historical Commission; approval by the Massachusetts Energy Facilities Siting Board; a construction permit from the Massachusetts Highway Department; and a permit from the United States Army Corps of Engineers pursuant to Section 10 of the Rivers and Harbors Act.

The proponent is not seeking financial assistance from the Commonwealth for the project. MEPA jurisdiction therefore extends to those aspects of the project that are within the subject matter of required or potentially required state permits and that have the potential to cause significant Damage to the Environment as defined in the MEPA statute. In this case, broad subject matter of the Chapter 91 License effectively confers full scope MEPA jurisdiction over the project for those portions of the project within Massachusetts and its Territorial Sea.

Coordinated Review

The project is undergoing review pursuant to the National Environmental Policy Act (NEPA, 42 USC 4321 et seq.), in a process that could lead to the requirement to prepare an Environmental Impact Statement (EIS). In the event that the United States Army Corps of Engineers requires an EIS, the proponent has committed to filing one set of documents that fulfills the requirements of both NEPA and MEPA. Both NEPA and MEPA regulations allow (and encourage) the preparation of joint EIS/EIR documents. I believe coordinated review makes sense, both in terms of allowing for maximum public and agency understanding of the project and to ensure that review by regulatory agencies is as efficient as possible. therefore allow the preparation of a joint EIS/EIR for the proposed project, if the Army Corps requires an EIS. I have written this Certificate to harmonize the state requirements with potential federal requirements to the maximum feasible extent.

Portions of the project pass through state waters, and waters and uplands under the jurisdiction of the Town of Harwich. Therefore, by my decision to require an EIR, the project automatically becomes a Development of Regional Impact (DRI) pursuant to the Cape Cod Commission Act and its implementing regulations (Chapter 716 of the Acts of 1989, Chapter 2 of the Acts of 1990, and Barnstable County Ordinance 90-12). The Cape Cod Commission (CCC) will review the DRI. MEPA and CCC have a formal process for coordinated EIR/DRI review pursuant to a Memorandum of Understanding between the agencies. The proponent has indicated a desire to prepare a joint EIR/DRI, but to date had not initiated the formal joint review process. proponent elects to prepare a joint EIR/DRI document, the document should include a stand-alone section that analyzes the consistency of the project with the standards contained in the CCC Regional Policy Plan (RPP). The proponent should also use the comments submitted by CCC staff as a basis for the DRI portion of the joint document. I anticipate that the CCC will

form a review subcommittee and begin the public hearing process for the DRI once a formal request for joint review is submitted. I encourage the proponent to begin the joint review process as soon as feasible.

Relationship of EIR to EIS

Because MEPA (like the Cape Cod Commission Act) is the product of state law, not federal law, MEPA review (and by extension Cape Cod Commission review) technically applies only to those portions of the proposed project that are located within Massachusetts, including its territorial waters (generally within 3 miles of the low water mark of the shore). I note that the proposed WTG array is located outside of Massachusetts and, therefore, is not subject to state regulatory requirements. The Coastal Zone Management Office (CZM) has broader jurisdiction because federal law (pursuant to the Coastal Zone Management Act) specifically delegates review authority over projects in federal waters to the Coastal Zone Management Office of the adjacent coastal state, provided that the state has a federally approved Coastal Zone Management Plan (Massachusetts has such an approved plan).

Nonetheless, despite the jurisdictional limitations on MEPA review, the proponent has voluntarily consented (within the meaning of Section 11.05 (8) of the MEPA regulations) to allow MEPA review of the entire project, including those portions of the project in federal waters. The proponent also consented to an extended ENF review period to allow for maximum public input into the scoping process, and to harmonize the timetables for the state and federal environmental reviews. I commend the proponent for these commitments. These commitments ensure that the impacts of the project will receive full disclosure in the state and regional review processes, and they ultimately will facilitate the Consistency Review, as information necessary for Consistency Review can be developed and refined in the EIR process.

The state permitting agencies (with the exception of CZM as described above) must base their permitting decisions and Section 61 Findings upon the portions of the project within Massachusetts. Therefore, in the scope below I have required that the proponent disaggregate the impacts of the project in the state territorial waters and overland from impacts that are occurring within federal waters, since the latter represent the aspects of the project that fall within the "voluntary" nature of MEPA review but lie outside the scope of state, regional, and local permitting. I have also included a separate alternatives

analysis for state permitting purposes, relating solely to the cable route and its associated impacts.

As of this decision date, the United States Army Corps of Engineers had not made a formal determination as to whether or not to require preparation of an EIS for the proposed project. Many of the scope issues below include a requirement for analysis of impacts that are technically not within the physical area of watersheet, water column, and seabed subject to the jurisdiction Therefore, many the informational requirements for of MEPA. areas under federal jurisdiction must be seen as contingent upon the requirement to prepare an EIS. However, even if the federal government does not require preparation of an EIS, most of the information requested in the scope will be necessary for the Massachusetts Coastal Zone Management Office to make its determination of coastal dependency and for its federal Consistency Review. Therefore, I strongly encourage the proponent to include all of the information requested below in the EIR, even if the document is not a joint EIR/EIS.

Content of the ENF

Many comments have expressed frustration with the lack of information contained in the ENF, especially for such large and potentially precedent-setting projects. The ENF contains only the barest details of the project and its potential impacts, and contains several factual errors. In addition, a representative of the proponent has publicly stated that the proponent knows little about electricity generation and supply. Against such a backdrop, the scope that follows is necessarily broad in its approach to the review of the proposed project. I anticipate the need for follow-up discussions with permitting agencies and technical experts both inside and outside of government to flesh out the details of the required environmental studies. I reserve the right to provide additional guidance to the proponent on the outline, content, and level of analysis in the EIR as the review process moves forward.

SCOPE

General

The EIR should follow the general guidance for outline and content contained in Section 11.07 of the MEPA regulations as modified by this Certificate. Because of the potential for coordinated review, I will allow the proponent some flexibility in data presentation. The EIR should contain a copy of this

Certificate, and a copy of each comment letter received, as listed at the end of this Certificate.

Alternatives

The EIR should include an evaluation of alternative feasible technologies for generating electricity equivalent to the capacity of the proposed project, as well as an assessment of alternative locations for the proposed technology. I do not see the need for an EIR-level alternatives analysis for the universe of potential alternatives, extending to other renewable technologies, many of which have not been demonstrated to be feasible at the scale of the proposed Nantucket Shoals project. I note that several court cases involving NEPA have determined that an EIS need not study alternatives that are "only remote and speculative possibilities," otherwise the EIS process risks becoming an "exercise of frivolous boilerplate1." The same principle holds for MEPA review of an EIR as well. I am therefore restricting the MEPA alternatives analysis to those alternatives, discussed below, that meet a reasonable standard of feasibility.

Clearly, traditional methods of electricity generation are technically feasible alternatives (as evidenced by the recent reviews of several large gas-fired power plants on the Massachusetts mainland). The viability of gas fired electricity production is sufficiently demonstrated so as to warrant inclusion in the alternatives analysis. Note that I am not suggesting it is necessarily appropriate to require selection of a gas-fired facility on the mainland as the preferred alternative, simply that it is appropriate to study the environmental impacts of such an alternative during the EIR process. The point of the EIR alternatives analysis will be to vary the project parameters of reasonable feasible alternatives to disclose relative impacts so that the general public and state agencies can be informed of relative impacts. (An analysis of feasible alternatives will also prove necessary for CZM to make a determination regarding "coastal dependency.")

The EIR should therefore contain a "generic" analysis for a gasfired mainland power plant with a capacity equal to the peak capacity of the Nantucket Shoals project, to determine such parameters as air emissions, water use, fisheries, avian, visual, and other environmental impacts. The generic discussion should

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¹ See Natural Resources Defense Council v. Morton, 148 U.S. App.D.C. 5, 15-16, 458 F.2d 827, 837-838 (1972) and Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 551 (1978)

include a coastal gas-fired plant as well as an inland gas-fired plant. For comparative purposes, the EIR should also briefly discuss the impacts of an oil-fired plant and a coal-fired plant of the same capacity as the proposed project.

The EIR should also include a discussion of alternative locations for a wind facility. The EIR should contain a screening analysis of other potential sites (these may be located in mountainous areas of western Massachusetts, elsewhere in or adjacent to Massachusetts waters, or in other New England states and adjacent federal waters). The screening analysis should include factors such as available land or watersheet area, wind field strength, proximity to and likely effect on important environmental resources, regulatory constraints, and potential conflicts with existing uses (such as shipping, navigation, commercial and recreational fishing, and aviation).

The EIR should contain more detailed study of the inland or coastal sites that are found to pass the screening analysis. The EIR should contain sufficient information to understand why the proponent has chosen Nantucket Shoals and why other sites were deemed infeasible for this particular project. The EIR should contain any alternatives necessary for CZM to conduct its Consistency Review and to determine coastal dependency. I recommend that the proponent consult with CZM to determine the range of alternatives necessary. The EIR should also include any other alternatives deemed necessary for study by the federal government as part of the NEPA review.

The EIR should include an analysis of alternative routes for the submarine and underground cable for the portion of the route within Massachusetts or its coastal waters. This analysis should assume the proponent's preferred location in Nantucket Shoals for the WTG array. The goal of this analysis will be to provide relevant information for state permitting agencies with Section 61 responsibilities for the project. The analysis should demonstrate that the cable routing minimizes impacts on benthic resources, water quality, submerged aquatic vegetation, and the shoreline environment at the landfall site. The EIR should evaluate alternatives to the proposed jet plow method of embedding the submarine cables. The EIR should also demonstrate that the overland route generally minimizes impacts, particularly construction impacts on wetlands and sensitive receptors along the route. The EIR should also include any other alternatives analysis required for state permitting purposes.

The EIR should investigate alternative configurations for the wind farm and alternative orientations relative to the coastline, in an effort to minimize visual impacts.

Cumulative Impacts

The proponent has filed for three relatively small wind farms in state waters, and four large wind farms in federal waters off Nantucket (a representative of the proponent has stated that the proponent initially intends to develop only one wind farm in state waters and one in federal waters). The EIR should examine the potential for cumulative impacts from the various Winergy proposals, and should demonstrate that the proponent has taken steps to feasibly minimize cumulative impacts, as required by the MEPA regulations.

I am also reviewing a large proposed wind farm by a different proponent in Nantucket Sound (EOEA #12643). The EIR should briefly discuss the potential for cumulative impacts from the Winergy LLC and Nantucket Sound projects. (I anticipate that the OMTF will begin the process of addressing cumulative impacts to the Massachusetts coastal waters from all of the proposed wind farms and other existing or potential developments.)

Permitting and Planning Consistency

The EIR should include a brief discussion of each state permit or agency action required for the project. The EIR should demonstrate that the project could meet any applicable performance standards or otherwise merit a variance from any applicable regulations.

The proposed project could help fulfill an important goal of the Commonwealth's 1997 Electric Utility Industry Restructuring Act (Chapter 164 of the Acts of 1997) by contributing to the Commonwealth's ability to meet its renewable portfolio standard. The EIR should briefly address the goals and requirements of this landmark legislation. The EIR should also address consistency with other state policies concerning energy and sustainability, including the provisions of Executive Order 385 (Planning for Growth). The EIR should also discuss consistency with any local or regional open space or growth plans for Cape Cod and Nantucket (I anticipate that the DRI portion of the coordinated document will fulfill the requirement to analyze consistency with local/regional plans for the Cape Cod area).

Project Feasibility

The EIR should include an analysis of technical and operational feasibility issues. The review process has generated questions regarding the feasibility of the proposed DC cable for the application to offshore wind farms, as well as questions about the feasibility of erecting and maintaining structures in the high-energy environment of Nantucket Shoals.

The project review by the Energy Facilities Siting Board will include analysis of such factors as the need for the transmission line, alternatives, route selection, cost, environmental impacts, and reliability. (Unlike any other state review process, the EFSB review may proceed prior to completion of the MEPA review.) If the EFSB review precedes MEPA review, I encourage the proponent to include a summary of the EFSB process and findings in the EIR to meet this informational requirement. Independent System Operator-New England (ISO-NE) would review the proposed interconnection to the grid, to determine the impact of the additional generation on local and regional transmissions systems; to determine whether any modifications to the to the transmission system are needed to accommodate the new source; and provide a cost estimate for any necessary modifications. If the ISO-NE studies are available by the time the EIR is published, the EIR should include a summary of key findings.

Environmental Impacts

The ENF contains almost no information on the potential environmental impacts of the proposed project, and it appears that the proponent has not undertaken any detailed environmental studies of the project area. To ensure that the EIR is founded on adequate information, I strongly recommend that the proponent undertake at least two years of pre-construction data collection on avian, fisheries, benthic, and wildlife impacts.

Visual

The visual impacts of the project have been mentioned more than any other issue among comments received. The EIR should include visual simulations of the appearance of the WTGs from vantage points on Nantucket that are sufficiently well spaced and geographically representative of the project area to capture a full sense of the overall visual impacts of the project. The visual simulations should include vantages from residential areas, historic sites, and public open spaces. I reserve the right to make more specific requirements for visual simulations

as the review process progresses. The EIR should include in an appendix any information necessary to ensure that the methodology for pictorial representation is transparent.

The EIR should also include an analysis of visual impacts from lighting. The EIR should discuss any federal lighting requirements (particularly requirements of the Federal Aviation Administration and United States Coast Guard). The EIR should also discuss whether any flexibility exists in terms of lighting colors, intensity, orientation, and/or flash frequency and duration. The EIR should evaluate any trade-offs between safety considerations (both to boaters and to airplanes), avian impacts, and visual impacts on Massachusetts landforms.

Noise

The EIR should include an analysis of noise impacts from the project. The EIR should analyze whether noise from the project (as measured on the A-weighted scale and by octave bands) will be measurable above background noise from the nearest representative locations along the coast of Nantucket. The EIR should also model noise impacts as measured from the base of the monopiles. The EIR should also evaluate the potential impacts of underwater noise and vibrations from the WTG array, with analysis of potential biological and ecological effects from a change in the noise environment.

Avian Impacts

The EIR should include a thorough assessment of impacts to birds. The EIR should focus on impacts to three categories of birds: migratory songbirds, wintering seaducks, and rare and endangered birds including Roseate and Common Terns and Piping Plovers. The EIR should address collision hazards and habitat alteration impacts. If the proponent prepares a formal risk assessment, any subjective inputs should be clearly identified and appropriate sensitivity analyses included.

The EIR should present as much pre-construction data as possible on the spatial and temporal characteristics of avian activity in the project area. The EIR should also present enough information on other alternatives studied to enable a meaningful comparison of impacts among the alternatives studied (I recognize that full-

² The Roseate Tern is endangered at both the state and federal level. The Piping Plover is threatened at both the state and federal level. The Common Tern is a state Species of Special Concern.

scale long-term study of all potential alternative sites may not prove feasible).

The EIR should address the potential for heightened mortality from unusual events, such as storms. The EIR should develop potential methods of assessing impacts from such events, and consider a range of management responses to reduce bird mortality.

The EIR should also assess impacts to birds from lighting of the WTG array. The EIR should develop a monitoring plan to gauge impacts post-construction, and develop appropriate action thresholds and mitigation if monitoring reveals a problem.

Fisheries Impacts

The EIR should include an assessment of impacts on fisheries (both commercial and recreational), with particular focus on potential impacts to fisheries habitat. The EIR should also assess potential indirect impacts caused by changes in water movement and sediment transport from placement of the WTG monopiles. The EIR should disclose whether armoring is proposed at the base of monopiles, and should evaluate potential impacts (both positive and negative) from the introduction of these "artificial reefs" in the Nantucket Shoals area.

The EIR should describe existing habitat conditions in the project area, and should identify fish species and types expected to occur in the project area. The EIR should also describe the temporal characteristics of the species present (i.e., what life stages of the various species are likely to be encountered, and at what times of year). The EIR should evaluate the potential impacts of the WTG array and associated cables (construction, operation, and maintenance) on benthic habitat and species composition and relative abundance in the project area. This analysis should include any impacts related to specific life stages of affected species.

Rare Species

The EIR should evaluate potential impacts on any state or federally listed rare or endangered species. The EIR should contain sufficient information for the Division of Fisheries and Wildlife to determine whether the project would result in the "take" of any protected species.

Marine Mammals

The EIR should evaluate potential impacts of the project on marine mammals, including any species of whale known to traverse the project area, and the Grey Seal, a Massachusetts Species of Special Concern. The EIR should discuss any requirements of the federal Marine Mammal Protection Act (16 USC 1361 et seq.) applicable to the proposed project, and demonstrate how the project is consistent with those requirements.

Land Alteration

The EIR should quantify the amount of land disturbed, both land under water/salt marsh, and uplands/inland wetlands. The EIR should discuss the resources present in lands proposed for alteration, including benthic resources, archaeological resources, and vegetation.

Wetlands/Drainage

The EIR should include a reasonably scaled map that delineates wetland boundaries and buffer zones present in the project area. The plans should also note any applicable local buffer zone requirements. The EIR should explain the significance of each wetland area to the interests enumerated in the Wetlands Protection Act. For each alternative, the EIR should quantify the amount of direct wetland alterations proposed. The EIR should include a demonstration that the proposed routing avoids or minimizes impacts to eelgrass beds and other submerged aquatic vegetation.

Water Quality

The EIR should address the water quality impacts of the project, including impacts from the proposed jet plow method of embedding the submarine cables. The EIR should also discuss impacts at the land fall site, and the feasibility of horizontal directional drilling in this area to minimize impacts.

Chapter 91/Public Trust

DEP has determined that the portion of the proposed project within Massachusetts is a non water-dependent use of tidelands, and will therefore require a variance from M.G.L. Chapter 91 and 310 CMR 9.00. The EIR should address the standards and requirements of the variance process specified at 310 CMR 9.21.

The EIR should include the following information to aid in this determination:

- 1. The specific regulatory provisions from which the proponent will seek variances;
- 2. Alternative designs, locations, or construction methods that would allow the project to proceed without a variance (the EIR should also explain why these alternatives are unreasonable);
- 3. The detriments to public interests in waterways due to the project, and proposed means by which the proponent will minimize these impacts;
- 4. Proposed measures to compensate for any remaining detriments to public interests in waterways; and
- 5. The overriding public interest served by the project, with provision of adequate supporting documentation.

The EIR should also address the standards for non water-dependent infrastructure facilities at 310 CMR 9.55, including analysis of impacts to maritime commerce, industry, recreation, and associated public access; living marine resources and water quality; and public views, visual quality of the shoreline environment, and historic and cultural resources near waterways.

Ocean Sanctuaries Act

The main cable associated with the proposed project is located partially within the boundaries of the Cape and Islands Ocean Sanctuary, established pursuant to the Massachusetts Ocean Sanctuaries Act (M.G.L. Ch. 132A S 13-16 and 18, and 313 CMR 5.00). Section 15 of the Act prohibits the building of any structure on the seabed or under the subsoil, and prohibits the construction of offshore electrical facilities. However, section 16 of the Act allows an exemption for such facilities within the Cape and Islands Sanctuary if the project can meet the other environmental requirements of the Act. Since the project requires a Chapter 91 License, the proponent may obtain an exemption under section 16, provided that the proponent demonstrates that the project:

- 1. Meets the six factors of the Act's Public Necessity
 and Convenience requirements (see 302 CMR 5.04 and
 5.08(4));
- 2. Receives applicable permitting approvals from the United States Army Corps of Engineers;
- 3. Obtains all other certificates, licenses, permits and approvals required by law; and

4. Will not be undertaken or located except in compliance with any general or special statutes, rules, regulations, or orders.

The EIR should include the information necessary to evaluate compliance with the applicable provisions of the Ocean Sanctuaries Act. Much of the information necessary to determine compliance, as explained in the comment from the Department of Environmental Management, will be required elsewhere in the EIR. The Section of the EIR on the Ocean Sanctuaries Act need not duplicate analysis conducted elsewhere in the EIR, but the section should include appropriate cross references to applicable technical analysis located in other sections of the document.

Federal Consistency

The EIR should address the concerns of CZM raised in the applicable comment letters, and provide sufficient information to facilitate the federal Consistency Review. The EIR should also address the applicable specific policies of the Massachusetts Coastal Zone Management Plan, including Energy Policy #1; Habitat Policy #1; Coastal Hazard Policies #1 and #2; and Public Access Policy #1.

Historic/Archaeological Impacts

The entire island of Nantucket is listed on the State and National Registers of Historic Places and is designated as a National Historic Landmark. The EIR should assess visual impacts on historic resources in the project viewshed. In addition, the EIR should evaluate any impacts on historic resources along any overland cable routes.

Underwater areas of the proponent's preferred project area have high sensitivity for archaeological resources. The EIR should analyze potential impacts on underwater archaeological resources (both shipwrecks and now-submerged prehistoric cultural artifacts). I strongly recommend that the proponent consult with the Massachusetts Historical Commission and the Massachusetts Board of Underwater Archaeological Resources to develop an appropriate scope for these studies.

Decommissioning Plan

The EIR should include a plan to remove the turbines, towers, cables, and other infrastructure in the event that the project ceases operation. The EIR should discuss the funding mechanism

for the decommissioning plan, and should outline the steps that would be taken to ensure minimization of environmental impacts during removal of structures.

Construction Period

The EIR should include an analysis of construction period impacts, including impacts at the landfall site and impacts associated with the proposed jet plow trenching method. The EIR should address construction impacts from the overland route as well, and address the impacts of any work proposed within a state highway layout. The EIR should also describe the locations of staging areas and impacts associated with the use of any staging areas.

Comprehensive Environmental Monitoring Program

Given the project's uniqueness, a considerable degree of uncertainty exists surrounding project impacts post-construction. To obtain meaningful data on impacts (and to aid in potential future environmental reviews of offshore WTG arrays both here and elsewhere), the EIR should outline a Comprehensive Environmental Monitoring Program (CEMP). For a good recent example of the structure and goals of a CEMP, I refer the proponent to the CEMP for the Maritimes/Hubline Project (EOEA #12355).

Comments and Circulation

The EIR should include a copy of each comment received. The EIR should respond to the substantive comments received. The proponent should circulate a hard copy of the EIR to each state agency from which the proponent will seek permits or approvals. The proponent should also circulate a copy of the EIR to those submitting written comments, for whom addresses are available. I have treated the comments received on the five separate Winergy LLC ENFs as one set of comments, since issues of alternatives and cumulative impacts will necessarily overlap to a great extent.

To save paper and other resources, I will allow the proponent to circulate the EIR in CD-ROM or similar format to individual commenters, although the proponent should make available a reasonable number of hard copies available on a first come, first served basis, to accommodate those without convenient access to a computer. The proponent should also make a hard copy available to the Nantucket and Harwich Public Libraries.

Mitigation

The EIR should include a summary of all mitigation measures to which the proponent has committed. The mitigation summary should serve to form the basis of the proposed Section 61 Finding to be presented in the Final EIR.

June 6, 2003 Date

Ellen Roy Herzfe

Comments Received (continues on following pages):

03/27/03 Robert McLaughlin Sr.

03/28/03 The Coalition for Buzzards Bay

04/02/03 Frederick Smith

04/03/03 Kathleen Taylor

04/03/03 William Murphy and Jane Zises

04/03/03 Anne Sawyer

04/04/03 Bonnie Simon

04/04/03 Joshua Bernstein

04/04/03 Stephen Simon

04/07/03 Mrs. H. Henoyan

04/07/03 Carol Rasic

04/07/03 J. Randall and Lynn Evans

04/10/03 Mary Makela

04/10/03 Lon Bonczek

04/10/03 Thomas Stemberg

04/10/03 Massachusetts Aeronautics Commission

04/11/03 Kathleen Tillery

04/11/03 St. George Tucker Aufranc

04/11/03 William Levy

04/14/03 Bob Dunbar

04/14/03 Weatherly Dorris

04/14/03 Gary and Carmen Grainger

04/14/03 William Sawyer

04/15/03 Rutherford Ellis

04/15/03 Transcribed comments from MEPA/USACE public meeting, Falmouth MA

04/16/03 Society for the Preservation of New England Antiquities

04/16/03 William Saltonstall

04/16/03 Samuel Gray

04/16/03 E. Kent Swift

04/16/03 Ken Molloy

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04/17/03 Transcribed comments from MEPA/USACE public meeting,
         Essex MA
04/18/03
         Jim Berry (with attachment)
04/18/03
         Mark Burns
04/22/03
         Mayor John Bell, City of Gloucester
04/22/03 Transcribed comments from MEPA/USACE public meeting,
          Provincetown MA
04/23/03
         Stephen Sawyer
04/23/03 Sandro Segalini
04/23/03 Michael Taylor
04/24/03 Massachusetts Highway Department (3)
04/24/03 Marianna Martini
04/24/03 Renee Caggiano
04/25/03 Peter Phippen
04/25/03 Jann Leeming and Arthur Little
04/25/03 Frank and Donna Brown
04/25/03 William von Rosenvinge
04/28/03 Transcribed comments from USACE/MEPA public meeting #1,
         Nantucket MA
04/28/03
         Rob Reynolds
04/28/03 Ted and Eileen Burt
04/28/03 Rebekah Gardiner
04/28/03 Herb Dean
04/28/03 C. David Burt
04/29/03
         Transcribed comments from USACE/MEPA public meeting #2,
         Nantucket MA
04/29/03
         Donald Dood
04/29/03 Joan Malonev
04/29/03 Thomas and Virginia Dabney
04/29/03
         John Sebestyen
04/29/03 G.L. Cross
04/29/03 James Maloney
04/29/03 George Bennett
04/29/03 Margaret Flanagan
04/29/03 Carol McMahon
04/29/03 Julie McMahon
04/29/03 Maurice Gibbs
04/30/03 Carolyn Dain
04/30/03 Joanne Eldred
04/30/03 Kathleen Cibotti
04/30/03 Emmett Eldred
05/01/03 Transcribed comments from USACE/MEPA public meeting,
          Boston MA
05/01/03 Peter Summers
05/01/03 Paul Miller and Louis Finnegan
05/01/03 Charles and Charlotte Goodwin
05/01/03 Mitchell and Leslie Cohen
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05/01/03
         Charles Bacon
05/01/03 George Fontaine
05/01/03 Norman Feintuex
05/01/03 Holmes and Mcgrath Inc.
05/02/03
         Lois Bernstein
05/02/03 Lawrence Fish
05/02/03 Marcia Due
05/02/03 William Gundy
05/02/03
         James Ho
05/02/03
         Jennie Brown
05/02/03
         John Bera
05/02/03
         Patty Frost
05/05/03
         David Bakalar
05/05/03
         Jodi Smith
05/05/03
         Thomas Marston
05/05/03
         Edward Igo
05/05/03
         Nancy Shaw
05/05/03
         Jann Taylor
05/05/03
         Millbury family (by Gargiulo/Rudnick)
05/05/03
         Richard and Priscilla McElvein
05/05/03
         Michael Follick
05/05/03 William Dugan
05/05/03
         Martha Patrick
05/05/03 Caroline Bacon
05/05/03 Caroline Balz
05/05/03 Allan Dragone
05/05/03
         Falmouth Conservation Commission
05/05/03 Frederick Smith
05/06/03 Alex McKenzie
05/06/03 Elizabeth Driscoll
05/06/03 Elizabeth Soli
05/07/03 Quintus Farrell
05/07/03 Michael Fenlon
05/07/03 Carlo Zezza
05/07/03
         Northland Residential Corporation (F. Stewart)
05/07/03 Nina Webber
05/07/03
         David Barry
05/08/03
         Robert Driscoll
05/08/03
         Keith and Peggy Krewson
05/08/03
         Charles Klotz
05/08/03
         Elfriede Collis
05/08/03
         James Coughlin
05/08/03
         The Trustees of Reservations
         Mary Alice Wheeler
05/08/03
05/08/03
         Martha Price
05/08/03 Susan Moran
05/08/03 Charles Yassky
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05/08/03
         Representative Eric Turkington
05/09/03
         Cynthia Allen
05/09/03
         William Allen
05/09/03
         Thomas Allen
05/09/03
         Carl Borchert
05/09/03
         Kathleen Taylor
05/09/03
         William Jones Jr.
05/09/03
         Paula Gillis and Edward Richards
05/09/03
         Edmund Merriam
05/09/03
         Christopher and Elizabeth Olsen
05/09/03
         Richard Hammel
05/09/03
         Gerald Weissmann
05/09/03
         Division of Fisheries and Wildlife
05/09/03
         Edward Goldstein
05/09/03
         Joseph and Elizabeth Cook
05/09/03
         Holly Hanoyan
05/09/03
         Linda and Bernie Grubstein
05/09/03
         Sheila and Bob Goldstein
05/09/03
         Vera Clark
05/09/03
         Richard Shriner
05/09/03
         Chris Eastland
05/09/03
         Barbara and Mike Fine
05/09/03
         Elizabeth Bolton
05/12/09 Deborah Beers
05/12/03 Pamela Truesdale
05/12/03
         Lynn Hodgson
05/12/03
         H. William Fleming
05/12/03
         Paul and Heather Farrell
05/12/03
         Barbara Furie
05/12/03 Frances MacKay
05/13/03
         Susan Edson
05/13/03
         David Varsano and Jill Goldstein
05/13/03
         Charmaine Blanchard
05/13/03
         Margaret Jewett Greer
05/13/03 Anne Kronenberg
05/13/03 Jeanette Sacchini
05/13/03
         William Hastings
05/13/03
         Paul and Patricia Hogan
         Joanne Holdgate
05/13/03
05/13/03
         Sam Farrell
05/13/03
         Elizabeth Foley
05/13/03
         Michael & Pamela Ryan
05/13/03
         Todd Dagres
05/13/03
         Nina Whitney
05/13/03
         Paul Decoulos
05/13/03
         Wingaersheek Improvement Association (J. Brown)
05/13/03
         Senator Robert O'Leary
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05/13/03 Marcia Copel
05/13/03 David Hill
05/13/03 Katherine Scott
05/13/03 Councillor Christine Rasmussen, City of Gloucester
05/13/03 Pauline Farrell
05/13/03 Herbert Gutterson
05/13/03 Jeanne Jikanowski
05/13/03 Thomas Jehl
05/13/03 Nancy Pendleton
05/13/03 Lois Glavin
05/13/03 Elizabeth Sanford
05/13/03 Sonya Driscoll
05/13/03 Cynthia and John Coffin
05/13/03 Jean Hemstreet
05/13/03 James Clark Jr.
05/13/03 Barbara Billings
05/13/03 Stephen Jelin
05/13/03 Rose Wagner
05/13/03 Rene Conrad
05/13/03 George DeMello
05/13/03 George Smith
05/13/03 Nanette and Sidney Small
05/13/03
         Sandy Mitchell
05/13/03 Margot Fraker Wynkoop
05/13/03
         Sebastiano and Susan Rooney Santostefano
05/13/03 Sharon and John Toulotte
05/13/03 William and Carolyn Duane
05/13/03 R. Michael Hans and Beverly Near
05/13/03
         Stephen Billings
05/14/03
         John and Catherine Mandile
05/14/03 Michael and Agnese Meehan
05/14/03 Anne Warhover
05/14/03 Nancy English
05/14/03
         Jonathan and Kathryn Burt
05/14/03 Peter and Martha Lennon
05/14/03
         Nantucket Planning and Economic Development Commission/
         Nantucket Board of Selectmen
05/14/03
          David and Nancy Babin
05/14/03
         Town of Falmouth (Selectmen and Planning Board) (with
         attachments)
05/14/03
         Thomas and Suzanne Albani
05/14/03 William Murphy
05/14/03 Norman Bernstein
05/14/03 Eileen Surette
05/14/03 Virginia Kuykendall
05/14/03 Frances McCarthy
05/14/03 Christopher McLaughlin
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05/14/03 Martha Gruson
05/14/03 Charles Rickands
05/14/03 Louis Finnegan and Christina Lewis
05/14/03 Robert O. Smith
05/14/03 George Needham
05/14/03 Corrine McLaughlin
05/14/03 Kiril Coonley
05/14/03 Barbara Loring
05/14/03 Frank Egloff
05/14/03 Richard Gibbs
05/14/03 Dana Smith
05/14/03 James McConnell Clark
05/14/03 Karin Lebherz Smith
05/14/03 Douglas Cooper
05/14/03
          Katherine Cooper
05/14/03
          Diana McLaughlin
05/14/03
          Darlene Howell and petitioners
05/14/03
         Barbara Roberts
05/14/03 Helen Morris
05/14/03 Elizabeth Skinner
05/14/03 Marian Ware
05/14/03 Rosemary Shelburne
05/14/03 Edward DeWitt
05/14/03 Quissett Association, Quissett Harbor House Land Trust,
          Quissett Yacht Club, and Quissett Harbor Preservation
          (by Fort Point Associates)
05/14/03
          Robin Singer
05/14/03
         Madeline Evsie
05/14/03 Frederick Dodge
05/14/03 Deborah Scanlon
05/14/03 Chuck Steinman
05/14/03
          Carol Kinsley
05/14/03
          Jim Berry
          Mr. & Mrs. H. Kerner Smith
05/15/03
05/15/03 Carol Reed
05/15/03 Carol Reinisch Suitor
05/15/03 Pasquale DeLeo Jr.
05/15/03
          Damien Kuffler
05/15/03
          Ronald and Linda Denault
05/15/03
          Gerald Cameron Jr.
05/15/03
          Nancy Hayward
05/15/03
          Suzanne Kuffler
          James O'Connor
05/15/03
05/15/03 Charles Jacobs
05/15/03
          Richard and Mary Bronski
05/15/03
          Mary Goldman
05/15/03
          Robert Reynolds
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05/15/03 Cynthia Haigh
05/15/03 Fay Allister
05/15/03 Jane Driscoll
05/15/03 Carol Raisic
05/15/03 Timothy Fulham
05/15/03 United States Department of the Interior
05/15/03
         The Learnard Family
05/15/03
         SPD Realty Trust (by Macero & Associates)
05/15/03
         Richard Michaelson
05/15/03 Gary Perwak
05/15/03 Christopher Carty
05/15/03 Eastport Trading Company
05/15/03 Carol and Howard Crocker
05/15/03 Ellen Needham
05/15/03
         Town of Ipswich Harbormaster
05/15/03
         Association to Preserve Cape Cod, Inc.
05/15/03 Martha Carroll Casey
05/15/03 Thomas Tullius
05/15/03 Whitney Keen
05/15/03
         Thomas Casey
05/15/03 Thomas Beddall
05/15/03 Quamquissett Beach Club
05/15/03 John and Catherine Mandile
05/15/03 Daniel and Maria Gallagher
05/15/03 Mary Reardon
05/15/03 Kathryn Bradley
05/15/03 Peter Krogh and Alicia Carol Wullschleger
05/15/03 Joseph and Helen Ann Dixon
05/15/03 Carlton and Gladys Grant
05/15/03 Margaret German
05/15/03 J.D. Frantz
05/15/03 Marian Clouse
05/15/03 Heather Wright
05/15/03 Glen Beasley
05/15/03 Robert and Athleen Zimmermann
05/15/03 William and Kay Dillon Pechilis
05/15/03
         Katherine Stover
05/15/03
         Todd Adelman
05/15/03
         Town of Ipswich Conservation Commission
05/15/03
         Edith Leary
05/16/03
         Holmes and McGrath Inc. (for M. Jewett Greer et al)
05/16/03 James Mooney
05/16/03 Allan Taylor
05/16/03 Joshua Holden
05/16/03 Alliance to Protect Nantucket Sound
05/16/03 Division of Marine Fisheries
05/16/03 Robin Surette
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05/16/03
         Massachusetts Energy Facilities Siting Board
05/16/03 Carl Bowin
05/16/03 Edward Crosby
05/16/03
         Caronccm@aol
05/16/03 Anita and Don Dickinson
05/16/03
         Massachusetts Division of Energy Resources
05/16/03
         Robert Squires
05/16/03
         Toni Ramos
05/16/03
         MassAudubon
05/16/03 Cape Cod Commission
05/16/03
         Barbara and Elliot Gewirtz
05/16/03 Charles Mann
05/16/03 James Caplan
05/16/03
         William Harding
05/16/03 Conservation Law Foundation
05/16/03 Jack E. Robinson
05/16/03 Dorothy Allen
05/16/03 Thomas Chamberlin
05/19/03
         Stephen Chalmers
05/19/03
         Humane Society of the United States/International
         Wildlife Coalition
         Joe Uzdavinis
05/19/03
05/19/03
         Barbara Sweenalies
05/19/03
         The Coalition for Buzzards Bay
05/19/03
         Dwight Williams
05/19/03 George and Marjorie Yost
05/19/03 William Bradshaw
05/19/03
         Sippewissett Association
05/19/03 Stephen Ells
05/19/03
         Judith Rowe
05/19/03 James German
05/19/03 Peter Crabtree
05/19/03 Jade Warfield
05/19/03 Elizabeth Cant
05/19/03 Mary Jean Howard
05/19/03 Michael Connor
05/19/03 Frederick Peters
05/19/03 James Luft
05/19/03 Virginia Williams
05/19/03 William and Glenna Mayer
05/19/03 Michael McKeen
05/19/03 Mary McGowan
05/19/03 D.G. Foulke
05/19/03 Laura Landrigan
05/19/03 Elizabeth Foley
05/19/03 Massachusetts Historical Commission (5)
05/19/03 Lisa Leiden
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ERH/ASP/asp